

SIGNAL PRIORITIZATION IN A COMMUNICATIONS SYSTEM

ABSTRACT OF THE DISCLOSURE

A method, system, and apparatus enables lower priority (e.g., access response) messages to be transmitted instead of higher priority (e.g., paging) messages when the lower priority messages become too backlogged in an environment in which the two types of messages share a given capacity. In other words, when an overload situation is detected, the shared capacity is regulated by ensuring that the lower priority messages have at least some bandwidth. For example, if (i) the lower priority messages reach a predetermined number or (ii) a particular lower priority message has been waiting a predetermined period of time, then at least a portion of the higher priority messages are diverted (e.g., delayed or deleted). In one embodiment, the higher priority messages that are initially diverted are a lowest priority subset of the higher priority messages. In another embodiment, a highest priority subset of the lower priority messages are transmitted first as capacity is made available.